

Program 14 - WOULD YOU BELIEVE IT? - January 6, 1941
 (Oddities in Nature)

SOMETHING TO DO AND TALK ABOUT FIRST

Find out what peculiarities of nature the children know about already. Because the broadcast deals with some of the common but miraculous achievements and behavior of the creatures living about us, it will be helpful for the children to share their knowledge of such behavior. Ask them if they know that:

The deer shed their antlers each year. Why are they seldom found in woods?

Squirrels always know exactly the right place to chisel through a nut shell. They never bother with an empty one.

Quail sleep in a huddle, in a sheltered open space, with a head in every direction to detect danger.

The mother Bullhead keeps her offspring in a compact school and guards them jealously.

DO YOU KNOW THESE WORDS?

platypus progeny solitary marsupial

LISTEN FOR THESE IDEAS

1. The platypus has the bill of a duck, the fur of an animal, and lays eggs. What is it?
2. How does the solitary wasp preserve food for its progeny?
3. What is a marsupial? Why is Australia the only place in the world where marsupials are found? What marsupial is the one exception to this statement?
4. How many new-born opossums does it take to balance a dollar?
5. Ants have cows.
6. Snakes hear by means of their tongues.
7. The Witchhazel is called the "howitzer" of the woods.

SOMETHING TO DO AND TALK ABOUT LATER

Write a story about one of the unusual occurrences in nature. Maybe you could choose your story from these suggestions:

- a. Where do orioles get horsehair to use in their nests?
- b. How do bluejays carry their eggs?
- c. How do sandhill cranes migrate?
- d. Where do herons build their nests?
- e. Why did the passenger pigeon become extinct?
- f. Why does the great crested flycatcher use molted snakeskin in the construction of his nest?
- g. If the cowbird doesn't build a nest, how does it have its young?

Wisconsin School of the Air
Afield with Ranger Mac
January 6, 1941.

WOULD YOU BELIEVE IT?

Hello Boys and Girls:

And a Happy New Year to you!

Since our last trip afield, three weeks ago, the sun has travelled quite a long way in its orbit, about 30 million miles, and the northern half of the earth is now, since December 21st, - our shortest day - beginning to come back - toward the sun. From now on the sun's rays will be getting more and more direct; the nights will get shorter and shorter, and the days longer, and Johnny Chuck's long winter nap is about half over. Ranger Mac hopes that Santa brought you many of the things you wanted, that you are glad to see your school-mates again, and eager to hit the trail again. What 1941 will bring to us and to our country is hard to prophesy, but let's hope for the best by saying:

" Welcome, Nineteen hundred forty-one!
Bring the world a lot of fun;
Say the war will soon be done!

Bring us joy, and love, and peace;
Don't let nation's hate increase;
Let the strife of ages cease!

Bring an end to dread and fear;
Make us mighty glad you're here;
Welcome, little bright New Year!"

Our first trip in 1941 is going to be about some of the curious things in nature; about some of the things so out of the ordinary that they seem odd to us, if we think about them at all. For example, I was at the see the other day while the wind was blowing, carrying snow with it. One buffalo stood out in the storm. Why it did not seek the shelter of the shed as the other did, I do not know. But the curious thing about it was that it faced the storm. It is my observation that all other game animals "turn tail", but the buffalo whether standing or lying always faces the storm.

Just before Christmas a neighbor boy delivered a gift package of fancy cookies to our home, and we started talking about a curious animal which

he found out in the marsh, and which he is now keeping in his cellar. It is an opossum. I don't suppose that many of you have ever seen an opossum, unless you have lived in the southern states where they are quite abundant. It has migrated north and is now found frequently in southern Wisconsin. The State Conservation Department reports many thousands killed each year. It is not an attractive animal with its long slender head, beady eyes, rough hairy coat, and long naked tail. It is so slow and clumsy of movement that it cannot defend itself, so it resorts to "playing dead" when it is attacked. Many of our animals do that, particularly among the insects. "Playing 'possum'" we call it. There are two very interesting things about this animal. The first is the way it takes care of its young. The female carries her nursery right along with her in the form of a pouch on the underside of the body. The young, six to twelve in number, are the most helpless creatures in the world. Nothing could be more helpless for they are naked, blind, and so small that it takes about 75 of them to balance a silver dollar. It would take the whole breed to fill a teaspoon. After they are born they crawl into the pouch and attach themselves to a nipple where they hang for dear life. Here they are nourished for six to eight weeks. Then they are strong enough to venture out, but they go no farther than the mother's back, where they cling to her hair. Sometimes the mother arches her long tail over her back, just as a squirrel does, and the little fellows wrap their tail around it, hanging head downward, making a picture of motherly care that is both curious and inspiring. Animals that have pouches for the care of their young are called marsupials. Marsupial means sac or pouch. And that leads us to the second curious thing about this animal. It is the only one of its kind found in the world, except in Australia, and there many different kinds of marsupials are found, among them the kangaroo. Australia is the home of more curious kinds of animals than any other place on the globe, and it has puzzled scientists to explain just why this is so. One way they account for it is this. Once Australia was a part of the mainland of Asia. What, of course, was

ages and ages ago. At that time the marsupials and other low orders of animal life were the only animals living. Then the land sank, leaving Australia out in the ocean with only its low form of animal life living there, many of the marsupials. There they have lived to this day, while on the main land of Asia higher form of animals sprang into existence. So Australia has many curious animals. And among them is the platypus. This animal always reminds me of the story of a great teacher of science. One time his students tried to play a joke on him, so they rigged up an insect all their own. They took the body of one insect, attached to it the legs of another, put on it the head of another, the wings of another, and then presented it to him for identification.

"Does it hum," he asked.

"Yes, it hums," said the students.

"Then it is a humbug," replied the scientist. And to this day the word "humbug" is applied to anything that looks phoney.

Well, the platypus looks like a humbug. If you were to take the body of a beaver, attach the bill and the webbed feet of a duck, a short flat furry tail, you would have an animal that looks like a mixture of duck and beaver. That's the platypus. It is just as much a mixture in its behavior for it lays eggs like a bird, incubates them like a bird, and suckles its young like any mammal - a real funny contraption of an animal, a left-over of bye-gone ages, a member of the lowest class of mammals which not trapped in Australia and Tasmania when the land sank separating these large islands from the mainland of Asia. One of the stamps of Tasmania has the picture of the platypus printed on it. This animal behaves rather peculiarly in the way it incubates its eggs. The animal selects a clay bank along some stream, and digs a burrow fifteen to twenty feet in length like our Kingfisher; plugs up the end of the burrow like a herabill does, and here the female incubated her eggs and nurses her young. Occasionally she must leave her burrow for food and at such times she wisely replaces the plugged end for safety.

The platypus is not the most remarkable animal in the world but I think it one of the queerest. Now let's turn our attention to a plant which is probably one of the most curious plants in the world. Since the beginning of time, insects have gained their food mainly from plants, but the plant I have in mind feeds upon insects, tempts an insect to light upon its warm glistening leaf to bask in the sun, then artfully closes upon it, then in a murderous fashion extracts the juices, then throws away the indigestible parts in somewhat the same way that an owl disgorges the indigestible parts of a mouse which it swallows. We can call this plant a cannibal. The name of this plant is the Venus Fly Trap. Let's see what happens. A fly lights on the leaf and proceeds to investigate, never suspecting that deadly danger is lurking near. Around the edge of the leaf are rather stiff hairs called cilia. These begin to turn up and the leaf begins to fold; slowly, oh, so slowly that the insect has no sense of danger. Soon the hairs fold, mesh together, and escape is impossible. The insect now struggles to escape thru the bars of its prison, but it is too late. Its struggles cause the leaf to act rapidly now and soon the insect is pressed upon by all sides of the leaf. Then the leaf secretes a digestive fluid that dissolves some of the tissues of the insect. Then the plant proceeds to feast upon the juices of the captive. A remarkable thing about this plant is you can put pieces of wood, paper or metals on the leaf and touch the trigger hairs, but they will not cause the leaf to close. Have you ever heard about this plant before? And don't you think it to be one of the most wonderful plants in the world?

Each fall we gather a few bushels of walnuts and store them with sand in a hole in the ground. But before storing them, the husks are removed by allowing the ants to pass over them in the driveway. It doesn't take long for the squirrels in the neighborhood to discover the presence of these nuts, and they start immediately to store them away for their winter food. I found that it doesn't take long for a couple of squirrels to store away a bushel of nuts. The other day when the snow was still on the ground one of the squirrels

returned to the garden for one of those nuts. I saw it scamper across the road and enter the garden. There it paused for a minute as though considering a deep problem. Then it seemed as though he had solved the problem for he ran a few paces and started digging down through the snow. Quite soon he disappeared from sight, and soon he came to the surface again with a black walnut in his mouth. With it he merrily scampered across the road to a cottonwood tree.

How did that squirrel know exactly where that nut was under a foot of snow? I know that he stored it there about two months before, but without any difficulty went directly to the spot even though the whole scene was changed by a foot of snow. Then as I watched him on the branch of a tree, his tail arched over his back, he turned the nut about a few times, then went to work as though he knew exactly the right place to chisel through the shell with the least amount of work. Another thing, if a squirrel stores away a nut, you can be sure that it's sound and full of meat. A squirrel, like many of the wild creatures, must have accurate memories, and they must have systems of their own whereby they mark places to which they wish to return. Of course, the marking must be done in their minds, but it remains so accurate that it makes us wonder how it can be done, and things we wonder about are mysteries.

Some of the greatest wonders of the outdoors are found among the insects. They have taught man many and many things that have helped make our lives more pleasant. These are days when operations can be performed without pain by the use of drugs. One of the ways is by injecting a drug into the spine that seems to paralyze the body. Scientists discovered that method from a wasp. This wasp, called the solitary wasp, makes its nest by burrowing into the earth. When the nest is prepared, it is then ready to lay its eggs. So the wasp preys on a grasshopper, or some other insect, stings it in just the right place, emits a liquid that paralyzes the victim but does not kill it. The wasp then drags its victim into its nest and upon it lays an egg. The grasshopper remains alive but cannot move. In due course of time the egg hatches, and the worm that emerges

finds its food well preserved for its coming - fresh meat which it feeds upon. So wasps knew how to give anesthetics long before man did, and in fact taught man how to do it.

One spring evening while we were eating supper, we heard through the open door a pounding on the screens on the porch. Imagine our surprise when we found a great many moths - as many as fifty, anyway - flying onto the screen trying to get in. The reason for these desperate efforts was a female moth which had just emerged from its cocoon. We had put the cocoon on the porch during the winter hoping to see the moth emerge. We marvel at the keenness of scent among animals, but how marvelous and keen must be the sense of smell among insects. Here was this female moth, giving off a scent so delicate that we could not detect it, yet strong enough to bring these gay-colored suiters for a distance of a mile or even more. You can hardly believe it.

And so Ranger Mac will close this trip afield with the statement that some of the greatest wonders are occurring in our own backdoor yards, and the greatest wonders are not always connected with things of greatest size.

"May the Great Spirit

Put sunshine into your Heart,

Today, and forever more,

HEAP MUCH!